

REMARKS

The foregoing amendments in claims 1 and 10 incorporate the limitations of claims 5 and 14, respectively, to make it clear that the temperature responsive layer contains a zinc oxide. These amendments are intended to present claims that define more clearly over the art of record.

In view of these amendments in claims 1 and 10, dependent claims 4, 5, 13, and 14 are cancelled.

Claims 3 and 12 were found to contain patentable subject matter. The foregoing amendments in these claims rewrite them in independent form by including the subject matter of the independent claims from which they depended.

Claims 19-26 are withdrawn as directed to a non-elected invention.

In response to the rejection of the pending claims under the judicially created double patenting doctrine in view of the commonly-assigned, co-pending U.S. application Serial No. 10/506,867 with a PCT filing date of March 3, 2003, Applicants submit herewith a suitable terminal disclaimer to overcome this basis of rejection.

Applicants respectfully traverse the rejection of claims 1, 2, 4-11 and 13-18 under 35 USC 102(b) as fully anticipated by either Japanese Publication No. 2001-084643 ("JP '643") or U.S. Patent No. 5,610,879 to Moriya et al. ("Moriya"). The JP '643 publication corresponds to U.S. Patent No. 6,524,766.

The JP '643 publication discloses a read-only, recordable, or rewritable optical disk medium including a lamination film whose reflectance increases with an increase in light intensity of incident light (claim 1, paragraph [0039]). Further, it discloses a super-resolution optical disk medium that enables reproduction of information from a recording mark less than the optical resolution, which is determined by a diffraction limit of an optical spot size (paragraph [0001]). It also discloses varying the reflectance of the lamination film by the multiple interference of the lamination film (paragraph [0006]).

The JP '643 publication further discloses constituent materials. It discloses laminating a reflecting film (Al-Ti film), a heat retaining film (ZnS-SiO₂ film), an inorganic super-resolution film (Co₃O₄ film), a substrate protecting film (ZnS- SiO₂ film), and a reflection imparting film (Ge-N film), in this order, on a substrate (paragraph [0046]).

The JP '643 publication also discloses: at least one thin film (inorganic super-resolution film), made of Co-containing oxide, formed in the plurality of films of the lamination film; a Ge, Si, and N-containing thin film formed between the substrate and the thin film made of Co-containing oxide; and an Au, Ag, and Al-containing thin film formed between the substrate and the thin film made of Co-containing oxide (claims 6-9). The publication further discloses that, other than the thin film made of Co-containing oxide, an inorganic super-resolution film may be used that includes either oxides, nitrides, sulfides, fluorides, or carbides of different elements having a plurality of compounds (paragraph [0028]).

The JP '643 publication also discloses that the inorganic super-resolution film is made of an oxide including at least one kind of element such as, for example, Co, Fe, Ni, Cu, Ag, and V (paragraph [0037], Col. 9, lines 33-38 of U.S. Patent 6,524,766). It is also disclosed that two ZnS-SiO₂ films are formed so as to sandwich the thin film made of Co-containing oxide (paragraph [0027]).

However, the publication does not disclose or suggest anything about a temperature responsive layer including a zinc oxide as now specified in claims 1 and 10 amended to include the subject matter of claims 5 and 14. Further, as acknowledged by the Examiner, the features of claims 3 and 12 are neither disclosed nor suggested in the publication.

Moriya et al. discloses a record medium including: a substrate having concave or convex information pits; and a thermosensitive material film, formed on the substrate, which is changed from a high reflectance state to a low reflectance state when a temperature thereof exceeds a predetermined temperature T and returns to the high reflectance state when the temperature thereof decreases to the temperature T or less (see claims 5 and 6).

However, the thermosensitive material film as disclosed in Moriya et al. is made of, for example, a phase change-type recording material containing Te, Sb, and Ge as its main components. Other suitable materials forming the phase-changing recording material are identified at Col. 6, lines 32-37 as containing Sb and Se as its main components, a material containing Te, Ge, and Sn as its main components, a material containing In and Se as its main components, and a material containing In and Sb as its main components.

Moriya et al. does not disclose or suggest anything about the temperature responsive layer containing a zinc oxide now specified in claims 1 and 10, and the claims dependent from them. Further, as acknowledged by the Examiner, the features of claims 3 and 12 are neither disclosed nor suggested in the publication.

Applicants are also filing herewith a Supplemental Information Disclosure Statement making of record certain additional prior art.

In view of the above amendments, Remarks, and the accompanying Terminal Disclaimer, Applicants believe the pending application is in condition for allowance.

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Respectfully submitted,

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